

Technical Data Sheet

DOWLEX™ 2366 Polyethylene Resin

Description

DOWLEX[™] 2366 Polyethylene Resin is an ethylene/octene-1 copolymer, produced in the proprietary solution process of The Dow Chemical Company. It has a unique molecular structure with a controlled side chain distribution, which provides excellent stress crack resistance properties combined with very good long term hydrostatic strength and high flexibility.

Applications

Pipes for hot and cold-water systems, e.g.:

- Floor heating
- Wall heating/cooling
- Ceiling cooling
- Radiator connections
- Warm/cold drinking water distribution
- Heat recovery systems
- Solar panels

Processing Recommendations

Typical extrusion temperatures for processing of DOWLEX™ 2366 Polyethylene Resin range from 190 to 230°C. The use of a reverse temperature profile may be beneficial on certain types of processing equipment. For further information, see our Extrusion Guideline.

Complies with

- EU, No 10/2011
- U.S. FDA 21 CFR 175.105(c)(5)

Consult the regulations for complete details.

Additive

Antiblock: NoSlip: No

Processing aid: No

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.933	g/cm³	ISO ² 1183-1
Melt Index			
190°C/2.16 kg	0.70	g/10 min	ISO 1133
190°C/5.0 kg	2.25	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit (SI)	Test Method
Tensile Modulus			ISO 527-2
2.00 mm, Compression Molded	560	MPa	

^{1.} Typical properties: these are not to be construed as specifications. Users should confirm results by their own tests.

^{2.} ISO: International Standardization Organization

Properties (Cont.)

Mechanical	Nominal Value	Unit (SI)	Test Method
Tensile Stress			ISO 527-2
Yield, 2.00 mm, Compression Molded	17.0	MPa	
Break, 2.00 mm, Compression Molded	43.0	MPa	
Tensile Strain			ISO 527-2
Yield, 2.00 mm, Compression Molded	13	%	
Break, 2.00 mm, Compression Molded	> 800	%	
Flexural Modulus	600	MPa	ISO 178
Thermal	Nominal Value	Unit (SI)	Test Method
Vicat Softening Temperature	119	°C	ASTM ³ D1525
CLTE – Flow (20 – to 70°C)	2.74 E-4	cm/cm/°C	DIN ⁴ 53752
Thermal Conductivity (60°C)	0.40	W/m/K	DIN 52612
Cured Properties	Nominal Value	Unit (SI)	Test Method
Shore Hardness			
Shore D, 2.00 mm	60		ISO 868

- 3. ASTM: American Society for Testing and Materials
- 4. DIN: Deutsche Industrie Norm

Product Stewardship

The Dow Chemical Company and its subsidiaries ("Dow") has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow does not support or intend for its products to be used in:

- a. long-term or permanent contact with internal bodily fluids or tissues. "Long-term" is contact which exceeds 29 calendar days;
- use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
- c. use as a critical component in medical devices that support or sustain human life;
- d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction; or
- e. use as an ingredient of a pharmaceutical injectable application.

Medical Applications Policy (Cont.)

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted. Dow does not endorse or claim suitability of its products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. **DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.**

Contact:

www.dow.com/contact

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

NOTICE: If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; (3) there is greater potential for Dow to change specifications and/or discontinue production; and (4) although Dow may from time to time provide samples of such products, Dow is not obligated to supply or otherwise commercialize such products for any use or application whatsoever.

NOTICE: This data is based on information Dow believes to be reliable, as demonstrated in controlled laboratory testing. They are offered in good faith, but without guarantee, as conditions and method of use of Dow products are beyond Dow's control. Dow recommends that the prospective user determine the suitability of these materials and suggestions before adopting them on a commercial scale.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability for the accuracy and completeness of such information.

This document is intended for use within Europe, Middle East and Africa.

